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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,909	09/05/2003	Heather Ellen Bergeron	EHP-003.03	1085
25181 7590 03/06/2007 FOLEY HOAG, LLP PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110			EXAMINER SHAH, PARAS D	
			ART UNIT	PAPER NUMBER
			2609	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/656,909

Applicant(s)

BERGERON ET AL.

Examiner

Paras Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/05/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/05/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to the Application filed on 9/05/2003.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

All of the inventors for the stated application have not signed the Oath of Declaration. There are only signatures present from five of the 10 total inventors.

Specification

3. The disclosure is objected to because of the following informalities: The attorney docket numbers should be removed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant mentions in claims 5 and 6 line 2: "the

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entity types corresponding to at least two of the plurality of entities correspond to at least two....” This claim is unclear as to what the applicant is trying to claim and therefore does not distinctly claim the invention. The following was interpreted as including at least two of the entities.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 7-11, 13, 15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Scheer (US PGPub 2002/0161674, filed on 01/22/2001).

As to claim 1, Scheer discloses a method comprising: receiving a request (see page 3, [0030], line 4) to change a relationship associated with a plurality of entities (see [0030], lines 6-8) (e.g. It is inherent that the submission of a work order will cause initiate a transaction deemed to be a relationship to a supplier of the identified work order as known as by a supply chain. The requested relationship change arises from the work order placed by the customer in response to a need such as maintenance. Once the work order is placed the supplier is required to fulfill the request from a contract between the two (see [0042], line 10).) interacting within an industry (e.g. see

page 3, [0030], lines 6-8) (e.g. It is inherent that this is referring to a product industry for supplying needed products); parsing the change request to identify a data structure (see [0044], line 17 and [0069], line 2 and right column, line 1-5) (e.g. it is inherent that the parsing of incoming messages will identify data associated with a transaction and then store the result in a specific data structure.) associated with the industry, the data structure including a plurality of entity types and relationship types (see [0069]) (e.g, Since the message being parsed contains transaction information, it is implied that the supplier and customer information is contained in the message); based on at least some of the plurality of entity types and relationship types corresponding to the plurality of entities (see [0023]) (e.g. The entity types are those in the supply chain and determined once the transaction message is parsed.), identifying a sequence of transactions (see, [0007], lines 6-9 and Abstract) (e.g. It is seen that these intelligent agents must identify the transaction, which in this case is the work order); and executing the transaction sequence (see [0055], line 21-25) to process the requested relationship change.

As to claim 2, Scheer discloses wherein the request corresponds to an electronic document having a natural language format (see [0072], line 11) with a fixed context (see page 3, [0030], lines 5-8) (e.g. The applicant discloses that context refers to the operations of a transaction (see page 4, [0008], lines 13-15 of the specification). The reference shows a similar context in a supply chain model as applied to a work order.) and a fixed grammar (see [0072], line 11).

As to claim 7, Scheer discloses wherein the industry is a product-based industry (see [0030], lines 6-8) (e.g. It is inherent that the supplier will supply the products to the

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customer depending on a work order in terms of a supply chain arrangement) and the entity types corresponding to at least two of a product manufacturer (see [0003], line 5), a product distributor (see [0003], line 5), a product reseller, a product marketer (see [0192], line 5-6) (e.g. It is inherent that the marketing team refers to the marketing team for a product when selling to a customer), a product seller (see [0003], line 4) (e.g. It is inherent that a supplier will sell products to the customer or send the products to a distributor for sale to a customer), a product purchaser (see [0003], line 4), a product maintainer (see [0030], line 6) (e.g. It is see that the management system described by this reference tracks the maintenance of a product and generates a work order), and a product regulator (see [0030], line 10) ((e.g. It is see that the management system described by this reference tracks the maintenance of a product and generates a work order based on the needed parts).

As to claims 8 and 9, Scheer discloses storing (see [0046], line 1-3) indicia associated with a change request in a first data structure (see page 3, [0030], line 5) (e.g. It is apparent that a data structure is associated with a work order submitted by a customer); and assigning a version number (see [0031], lines 1-4) (e.g. In this case, the version number is interpreted as a date, which is referred when a work order is rescheduled. It is inherent that a number is assigned to a work order in order for modification to the existing work order (re-execution is performed to override the previous transaction) to be done when retrieved) to the first data structure.

As to claim 10, Scheer discloses wherein the request (see [0030], line 4) is received from an electronic data interchange system (see [0048], line 7).

As to claim 11, Scheer discloses wherein the request is received from at least one user interface (see [0096], line 8) and application program interface (see [0045], line 1-3) (e.g. It is inherent that some sort of application interface is used to display the operation of the supply system mentioned by the reference).

As to claim 13, Scheer discloses wherein the requested relationship change see page 3, [0030], lines 6-8) (e.g. It is inherent that the submission of a work order will cause initiate a transaction deemed to be a relationship to a supplier of the identified work order as known as by a supply chain) corresponds to at least one contractual provision associated with a plurality of entities (see [0042], line 10) (e.g. It is seen that due to a contractual provision the customer must pay a certain fee for initiating the transaction as an example that a contract is present).

As to claim 15, Scheer discloses wherein the indicia (see [0109], lines 1-2) associated with the plurality of entities (see [0109], line 2) correspond to a plurality of nodes (see [0109], lines 8) (e.g. It is seen that node is plural and will consist of more than one node in a semantic network see (page 9, [0109], lines 9) and the requested relationship change corresponds to at least one link interconnecting at least some of the plurality of nodes in the semantic network (see [0111], lines 6-10) (e.g. It is implied that when a transaction takes place a comparison will be done to previous concepts, which are connected via nodes in the network).

As to claim 17, Scheer discloses wherein the execution of a part of a transaction sequence (see [0116], lines 3-5) (e.g. This section shows a question determining if certain parts will fail, if these will fail then parts will be order to initiate and execute a

transaction (work order)), forming an instance of the semantic network (see [0117], right column, lines 9-10) (e.g. It is implied that the local additions are made as a result of the processing, if a transaction needs to be made and populating instances).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer as applied to claim 2 above, in view of Bird *et al.* (US 6,757,672).

Scheer discloses methods for receiving a transaction associated with the interaction between entities in an industry and executing the transaction to process the relationship change and the request corresponding to a fixed grammar. However, Scheer does not specifically disclose that the grammar used is a Backus-Naur format. Bird *et al.* discloses the grammar being of Backus-Naur format (see col. 2, lines 10-15). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to have combined the methods for processing a transaction using a grammar as presented by Scheer with the grammar type specified by Bird *et al.* The motivation to have combined the references is for data extraction by a computer is commonly used for a grammar defining command structure (see col. 2, lines 15-17).

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10. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer as applied to claim 2 above, in view of Thorsen *et al.* (US PGPub 2002/0062224, filed on 05/21/1999).

As to claims 4-5, Scheer discloses methods for receiving a transaction associated with the interaction between entities in an industry and executing the transaction to process the relationship change. However, Scheer does not specifically disclose the industry being a service-based industry. Thorsen *et al.* does disclose the industry being related to a service-based industry (see Abstract) (e.g. health care industry) corresponding to at least two of a service provider (see Abstract), healthcare subscriber (see [0028], lines 1-2) (e.g. It is apparent that both the employer and the employee are health care subscribers since they pay a portion of the premiums), service purchaser (see [0028], lines 1-2) (e.g. Purchase of a health plan is a service purchase), service maintainer (see [0027], line 1-3) (e.g. The service maintainer was interpreted as an administrator who oversees the processing of payments), and health care practitioner (see [0028], lines 7) (e.g. It is implying that a doctor is examining the employee or patient). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to have combined the methods for receiving a transaction request as presented by Scheer with the application to the service industry as taught by Thorsen. The motivation to have combined both references is to track the activities of a the service or healthcare industry (see Thorsen *et al.* [0004], lines 1-2) (e.g. Further, the reference by Scheer discloses that a service-based industry also uses a supply-chain (see [0003], lines 15-16) For example, healthcare supply chain would

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consist of the health care providers to the patients (filing claims). Therefore, it would have additionally been beneficial to incorporate the benefits of Scheer to the healthcare service-industry in order to have provided the advantages as shown by Scheer that include determining customer-specific information regarding maintenance and consolidated shipping based on customer needs (see [0028], [0160], and [0161]).

As to claim 6, Thorsen *et al.* discloses wherein the request corresponds to at least one of a request to enroll new subscribers and new contract (see [0048], lines 5-6) (e.g. members is equivalent to subscribers) (e.g. It is inherent that the new enrollee will be bound to a contract once signed) (see [0017], line 9-12), request for payments (see [0012], lines 8).

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer as applied in claim 1 above, in view of Franks *et al.* (US PGPub 2003/0144850, filed on 05/09/2001).

Scheer discloses methods for receiving a transaction associated with the interaction between entities in an industry and executing the transaction to process the relationship change and parsing the language representation of a request. However, Scheer does not specifically disclose the parsing into a plurality of field and mapping the field into a database. Franks *et al.* does disclose the parsing into a plurality of fields (see page 6, [0086], lines 8-9); and mapping some of the fields (see [0075], lines 8-9) (e.g. The extraction can be seen as a mapping between various fields as seen by [0076], [0077], [0078], and [0079]) into a data base table (see [0086], lines 26) (e.g. A different database table is used depending on data type [0059], lines 3-5). It would have been

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obvious to one of ordinary skilled in the art at the time the invention was made to have combined the methods for receiving and parsing a request as presented by Scheer and the parsing of the data into various fields into a database as taught by Franks in order to have been able to automatically process the electronic data from customer's information (see [0013], right column, line 1-4).

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer as applied in claim 1 above, in view of Gilles *et al.* (US 6,104,999, filed on 04/06/1998).

Scheer discloses methods for receiving a transaction associated with the interaction between entities in an industry and executing the transaction to process the relationship change. However, Scheer does not specifically disclose an electronic message being sent as a result of error detection. However, Gilles *et al.* does disclose a message being formed when errors are detected (see col.5, lines 60-66 and col. 11, lines 4-10) (e.g. It is inherent that since this is being implemented as an electronic exchange of information for a transaction the error message detected will be an electronic message). It would have been obvious to one of ordinary skilled in the art to have combined the methods for transaction presented by Scheer with the error detection message sent presented by Gilles *et al.* The motivation to have combined the references includes detecting errors during parsing of information due to the various parts contained in the electronic transaction (see Giles col. 14, line 12-25).

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer as applied in claim 15 above.

Scheer discloses methods for querying (see page 11, [0115], line 19) the semantic network (see [0115], line 1) to obtain data associated with different entities (see [0109], line 1-2) and requested relationship change (transaction) (e.g. It is implied that querying of the semantic network will obtain data for the relationships between the entities as well as the requested transaction or work order in this case that will initiate the transaction). However, Scheer does not specifically disclose the formatting of a data in a natural language. It would have been obvious to one of ordinary skilled in the art at the time the invention was made to have formatted the system of Scheer in order to have obtained data once the data is found the semantic network since the initial transaction request, which is parsed, is formatted in a specific language for a certain grammar. Hence, the motivation to have formatted the obtained data is to have language construct similar to the parsed transaction syntax (see [0072], line 10-11).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Guheen *et al.* (US 6,721,713) is cited to teach identifying plurality of entities in a web network.

The Bennett *et al.* (US PGPub 2004/0254808) is cited to teach a billing method rules among various entities electronically.

The NPL document by Medjahed *et al.* ("Composing Web services on the Semantic Web") is cited to teach web services and semantic networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paras Shah whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-FRI. 7:30a.m.-5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.S.

2/18/2007


XIAO WU
SUPERVISORY PATENT EXAMINER